

IN THE CLAIMS:

Please cancel claims 1-12, without prejudice

Please amend the following claims, pursuant to 31

13. (Amended) A method for determining the presence

in a test sample, comprising:

contacting [the] a chimeric enzyme [of claim 1] with a (1) test sample, (2) a molecule which binds to a [mimotope] mimotope of the chimeric enzyme, and (3) a substituent upon which the chimeric enzyme catalytically acts, to form a reaction mixture, wherein said chimeric enzyme comprises a starting enzyme comprising a polypeptide and said mimotope, said mimotope comprising at least one amino acid, wherein said chimeric enzyme is constructed by inserting a sequence of said mimotope into a sequence of said starting enzyme, or replacing at least one amino acid of the starting enzyme with a sequence of said mimotope, with the proviso that the enzymatic activity of the chimeric enzyme is equivalent to that of the starting enzyme and the activity of the chimeric enzyme is modulated upon binding of said binding molecule to the mimotope; and

detecting the amount of catalysis of the substrate achieved by the chimeric enzyme, wherein the binding molecule modulates the catalysis by the chimeric enzyme] in comparison to the amount of catalysis of the substrate observed in the absence of said chimeric enzyme.

At claim 18, please delete "19" and insert --13--.

20. (Amended)

A method for determining the presence or amount of an analyte in a test sample comprising:

contacting [the] a chimeric enzyme [of claim 1] with a (1) test sample and (2) a substrate upon which the chimeric enzyme catalytically acts, to form a reaction mixture, wherein said chimeric enzyme comprises a starting enzyme comprising a polypeptide and said mimetope, said mimetope comprising at least one amino acid, wherein said chimeric enzyme is constructed by inserting a sequence of said mimetope into a sequence of said starting enzyme or replacing at least one amino acid of the starting enzyme with a sequence of said mimetope, with the proviso that the enzymatic activity of the chimeric enzyme is equivalent to that of the starting enzyme and the activity of the chimeric enzyme is modulated upon binding of said binding molecule to the mimetope; and

detecting the amount of catalysis of the substrate achieved by the chimeric enzyme[, wherein the analyte modulates the catalysis by the chimeric enzyme] in comparison to the amount of catalysis of the substrate observed in the absence of said chimeric enzyme.

22. (Amended) A method of claim 20, wherein the analyte is contacted with the chimeric [first] enzyme prior to contacting with the test sample and the substrate.